

AS Cont. Sub E1  
contacting a first component of an ink jet printing module having a surface with a  
patterned thermoplastic bonding component; and  
heating the surface to bond the surface to the patterned thermoplastic bonding  
component.--

AB Sub E1  
--20. (Amended) The method of claim 18, wherein the protector strip includes a  
thermoplastic bonding material adjacent to the orifice plate.--

AS Sub E2  
--21. (Amended) A method of manufacturing an ink jet printing module comprising:  
contacting a first component of an ink jet printing module having a surface with a  
patterned thermoplastic bonding component;  
contacting a second component of the ink jet printing module having a surface  
with the patterned thermoplastic bonding component; and  
heating the surface to bond the surfaces to the patterned thermoplastic bonding  
component.--

Sub D3  
--29. (Amended) An ink jet printing module comprising a piezoelectric element having a  
surface, and a patterned thermoplastic bonding component heat-bonded to the surface.--

AD Sub E1  
--30. (Amended) The ink jet printing module of claim 29, wherein the thermoplastic  
bonding component includes a first surface heat-bonded to the surface of the piezoelectric  
element and a second surface heat-bonded to a surface of a component of the ink jet printing  
module.

AB Sub E1  
--42. (Amended) The ink jet printing module of claim 41, wherein the filter has a width  
of 300 to 495 microns.--

Please add new claims 44-46 as follows:

AB Sub E1  
--44. (New) A method of manufacturing an ink jet printing module comprising:

contacting a first component of an ink jet printing module having a surface with a thermoplastic bonding component; and

heating the surface to bond the surface to the thermoplastic bonding component wherein the first component of an ink jet printing module includes lead zirconium titanate.

Sub E1  
--45. (New) A method of manufacturing an ink jet printing module comprising:

contacting a first component of an ink jet printing module having a surface with a thermoplastic bonding component; and

heating the surface to bond the surface to the thermoplastic bonding component wherein the ink jet printing module includes an ink channel, a piezoelectric element being positioned to subject ink within the channel to jetting pressure, and electrical contacts arranged for activation of the piezoelectric element and wherein the thermoplastic bonding component is placed over the ink channel and includes a filter.--

Ag cont.  
Sub DA  
--46. (New) A method of manufacturing an ink jet printing module comprising:

contacting a first component of an ink jet printing module having a surface with a thermoplastic bonding component;

contacting a second component of the ink jet printing module including an orifice plate having a surface with the thermoplastic bonding component; and

adhering a protector strip over the orifice plate.--

In the Abstract:

Please replace the Abstract with the following version:

A10  
-- An ink jet printing module can be manufactured without the use of a liquid adhesive to bond components of the module. The module can include a thermoplastic bonding component. The module can include a piezoelectric element. The piezoelectric element can be disposed over the surface of a body to cover pumping chambers in a manner to pressurize ink in the pumping chambers to eject the ink.--